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EXAMINER KASHNIKOW, ERIK				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/543,077

Applicant(s)DAMBRICOURT, GERY BERNARD
MARIE**Examiner**

ERIK KASHNIKOV

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-82 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37-82 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 October 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| <p>1) <input type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)</p> <p>Paper No(s)/Mail Date _____</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)</p> <p>Paper No(s)/Mail Date _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application</p> <p>6) <input type="checkbox"/> Other: _____</p> |
|---|--|

DETAILED ACTION***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 37-45, 48, 52, 58-59 and 66-81 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 32-39, 53, 56-69 and 72-73 of copending Application No. 10/542,935. Although the conflicting claims are not identical, they are not patentably distinct from each other because the physical property taught by the equation present in the instant application would either be inherent or obvious for one of ordinary skill in the art to optimize. The case for motivation and optimization are discussed further in the rejections below (see paragraph 28 of this office action).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 37-79 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 37 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In this particular instance it is not clear which value, 2.2 or 3 is associated with the embodiment with polyethylene and which value is associated with the embodiment without polyethylene.
6. Claims 49 and 55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Examiner suspects Applicant wants the melt flow index of the second polymer to be between the range stated in claim 49 and below the number indicated in claim 55, and not the tube, and to further prosecution Examiner will treat the claims as such.

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7. Claims 72 and 78 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In the instant case the scope of the claim is confusing because it is not clear how the tip would place the wall of the reducer under centrifugal radial tension.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 37-63, 65-71, 76 and 80-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dambricourt (WO/2001/068355 with US 2003/0194521 used as an English translation) in view of Johnson et al. (US 5,314,746).

10. Dambricourt teaches a tube resistant to stress cracking and impermeable to water vapor (paragraph 0001).

11. In regards to claim 37 Dambricourt teaches a tube which has a skirt and a distribution head, wherein the walls are made from at least one ethylene linear olefin copolymers which has a melt flow index of between 3-10g/min, and a wall thickness at mid height of between 0.30 and 1.00mm and that the tube is formed from a single operation, which would produce a single piece assembly (claim 1).

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12. In regards to claim 43 Dambricourt teaches that multiple copolymers can be used to form the wall of their tube (claims 17 and 18).

13. In regards to claims 44 - 47 Dambricourt teaches that the second polymer can be present between 33 and 67% by weight with respect to the first polymer (claim 18).

14. In regards to claims 48-50 Dambricourt teaches that the second polymer can be ethylene-octene copolymer and

have a melt flow index of 3-4 g/10mins (claim 19).

15. In regards to claims 56 and 57 Dambricourt teaches that the tube can have lengths of 40-200mm inclusive (paragraph 0008).

16. In regards to claim 58 Dambricourt teaches that the tube be formed by injecting the polymers into a mold cavity which has a mold insert which contains a central part which has a free upper end and is centered on the tube (paragraph 0011). In regards to

the requirement that the impression bears a resemblance to the tube skirt, while

Dambricourt is silent regarding this the pictures shown by Dambricourt show the same features as the pictures shown by Applicant (Fig 5 Dambricourt (top) Fig 5 applicant (bottom)).

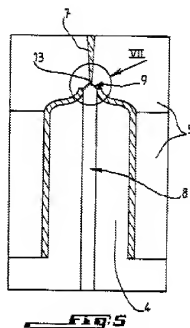


Fig. 5

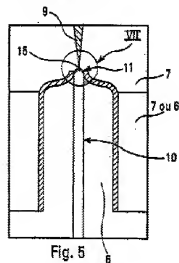


Fig. 5

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17. In regards to claim 59 Dambricourt teaches using feed channels for the injection molding (paragraph 0122).

Dambricourt also shows in the feed or supply channels forming an apex wall (Figure 7).

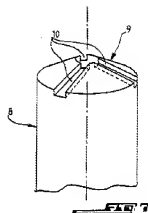
18. In regards to claims 60 and 61 Dambricourt teaches that feed channels form at least 15% of the upper part of the head (paragraph 0122) and at least 25% (paragraph 0123).

19. In regards to claim 62 Dambricourt teaches that the channels increase in width from the injection point to the edges (paragraph 0124).

20. In regards to claim 63 Dambricourt teaches that the tubes have a zone of narrowing or a throttle zone located below the evacuation point (paragraph 0125).

21. In regards to claim 65 Dambricourt teaches that the central part of the injection core be mobile (paragraph 0016). Dambricourt also teaches that the mobile part can be pulled back a set distance to form the upper wall in a single piece (paragraph 0016). Since all other limitations have been taught by Dambricourt it would have been well with in the ability of one of ordinary skill in the art at the time of the invention to form the apex wall.

22. In regards to claims 66-70 Dambricourt teaches a sunken cone at the evacuation orifice (paragraph 0012) they are silent regarding the specific angles and projecting cone frustums. However it is examiners opinion that this is an obvious design choice, because it allows for controlled evacuation of the contents of the tube, and it is well with in the abilities of one of ordinary skill in the art at the time of the invention.



23. In regards to claim 71 Examiner is treating it as a product by process, for information on product by process see MPEP 2113. In regards to claims 71 and 76 Dambricourt teaches a nozzle (a cavity through which the material is led into or out of the tube (paragraph 0111)) as is shown in figure 5 above. One of ordinary skill in the art at the time of the invention would recognize the area with the narrowing of the tube within the circle as a nozzle. Dambricourt also teaches that a reducer can be incorporated into the tube (paragraph 0129).
24. In regards to claim 80 Dambricourt teaches that the tube in claim 37 be formed with a method utilizing a single injection mould comprising an impression and a core (paragraphs 0109-0113).
25. While Dambricourt teaches the above stated tube and method of forming the tube, they remain silent regarding the use of polypropylene.
26. Johnson et al. teach a polyolefin films which can be comprised of copolymers of propylene and ethylene (column 2 lines 3-5).
27. In regards to claim 37, 38, 39, 42 and 81 Johnson et al. teach that the copolymers of polypropylene and polyethylene have a flexural modulus of 137.9-689.5 MPa (column 8 lines 16-20).
28. In regards to claims 37 and 82, absent a showing of criticality with respect to "the dispersion factor Kd" (a result effective variable), it would have been obvious to a person of ordinary skill in the art at the time of the invention to adjust the "flexural of the polymers" through routine experimentation in order to achieve "an optimal rigidity" and arrive at dispersion factor Kd including that presently claimed. It has been held that

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discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

29. In regards to claim 40 Johnson et al teach that polypropylene ethylene copolymer be semi-crystalline, or heterophase (column 3 lines 1-2).

30. In regards to claim 41 the preceding paragraphs have dealt with embodiments of the invention which contain solely the polypropylene ethylene copolymer, which as stated above has a flexural modulus lower than 850 MPa.

31. In regards to claim 44 and 46 Johnson et al. teach the first polymer (polypropylene and polyethylene copolymer) and Dambricourt as stated above teach the use of ethylene octene copolymer, as well as concentrations within the range specified by Applicant, therefore all limitation of the embodiment in claim 50 are met, and the physical property (in this case flexural modulus would be inherent).

32. In regards to claim 51 Johnson et al. teach the mixing of a polypropylene polyethylene copolymer with polypropylene (column 13 lines 15-20).

33. In regards to claim 52 while Johnson et al. is silent regarding mixing the polypropylene polyethylene copolymer with another polypropylene polyethylene copolymer, Dambricourt teaches using copolymers of the same materials as a mixture for the tubes in their invention. One of ordinary skill in the art would be motivated to use the same materials because it can form a tube with improved flexibility (paragraph 0017). Therefore it would of been obvious and well within the abilities of one of ordinary skill in the art at the time of the invention to use slightly different polypropylene and polyethylene copolymers in the forming of the tube.

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34. In regards to claim 53 the capacity of the tube would have been a design choice, and it would have been well within the abilities of one of ordinary skill in the art at the time of the invention to take a polymer, with the flexural modulus taught above and form a tube with a 30ml capacity.

35. In regards to claims 54 and 55 Johnson et al. teach that the copolymer of their invention has a Melt Flow Index of 0.01-500dg/min (column 2 line 19).

36. One of ordinary skill in the art at the time of the invention would be motivated to modify the tube of Dambricourt with the invention of Johnson et al. because the tube of Dambricourt which offers improved resistant to stress cracking and is impermeable to water vapor (paragraph 0007) would benefit from the high puncture and tear resistant offered by Johnson et al. (column 1 lines 7-10).

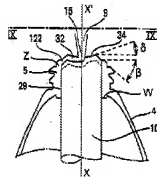


Fig. 9

37. Claims 64, 77, and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dambricourt (WO/2001/068355 with US 2003/0194521 used as an English translation) in view of Johnson et al. (US 5,314,746) as applied to claim 58 and in further view of Nishikawa (US 5,372,863).

38. While Dambricourt and Johnson et al. teach the tube and method for forming the tube as shown above, they are silent regarding a ring of material perpendicular to the axial direction under the neck.

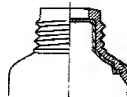
39. Nishikawa teaches a laminate tube container to be used for toothpaste (column 1 lines 10-12).

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40. In regards to claim 64 Nishikawa shows a view of a conventional laminate figure, which includes a ring of material similar to applicants under the neck (See figure 2 of the prior art compared to figure 9 of Applicant).

FIG. 3
PRIOR ART

41. Also in regards to claims 77 and 79 Nishikawa shows another conventional embodiment which has the chimney feature described by Applicant (Figure 3).

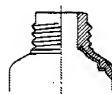


42. Since the two inventions are drawn to analogous art one of ordinary skill in the art would be well aware of this conventional top and would it would be well within the abilities of one of ordinary skill in the art at the time of the invention to include it in their tube if they so desired.

43. Claims 73-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dambricourt (WO/2001/068355 with US 2003/0194521 used as an English translation) in view of Johnson et al. (US 5,314,746) in further view of Doherty et al. (WO/2001/094213).

FIG. 2
PRIOR ART

44. While Dambricourt and Johnson et al. teach the tube and method for forming the tube as shown above, they are silent regarding the cap incorporated onto the tube.



45. Doherty et al. teach a dispensing apparatus with a reusable break off cap (page 1 lines 8-13).

46. In regards to claim 73 Doherty et al. teach that the dispenser and nozzle are molded as a single piece (claim 19).
47. In regards to claim 74 and 75 Doherty et al teach that the cap can be reattached by means of a asymmetric threads as seen in figure 18 (threads are labeled 70 see also page 19 lines 16-18).
48. One of ordinary skill in the art at the time of the invention would be motivated to modify the tube of Dambricourt and Johnson et al. with the tubes of Doherty et al. because the tubes of Dambricourt and Johnson et al. which are resistant stress cracking and impermeability to water vapor (paragraph 0007) would benefit from the nozzle of Doherty et al. because the tubes provides a low cost multi use container that can be used with environmentally sensitive products (column 2 line 66– column 3 line 2).

Response to Arguments

49. Applicant's arguments, see arguments, filed 10/03/08, with respect to the drawings have been fully considered and are persuasive. The objection of the drawings has been withdrawn.
50. In regards to Applicant's arguments concerning the double patenting, Examiner recognizes that the copending application is silent regarding the dispersion factor (K_d), but as clearly pointed out in the rejection, and in the body of the action it would be obvious to one of ordinary skill in the art at the time of the invention to modify this property so that an optimal rigidity for the object is obtained. Examiner also points out

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that the language for inherency of the dispersion factor has been removed from the double patenting rejection.

51. In regards to Applicant's arguments concerning the 112 2nd paragraph rejections of claims 49 and 55, the way the claims are presently written, it is still unclear as to whether the melt flow index is applied to the whole tube or just the specific polymers disclosed on page 15 of the amendment. Appropriate correction is required.

52. In regards to Applicant's arguments concerning the 112 2nd paragraph rejections of claims 72 and 78 Examiner did not say Applicant is not distinctly pointing out that which is regarded as their invention, or request that the claim be amended to set forth how the invention works. Examiner is merely stating that the scope of the claim is confusing. Given this confusion the scope of the invention would be unclear and therefore the rejection is upheld. Clarification is requested.

53. In regards to Applicant's arguments that neither Dambricourt nor Johnson et al. explicitly state the desired dispersion factor, Examiner agrees that it is not specifically stated however that is why Examiner stated it would be obvious to one of ordinary skill in the art at the time of the invention to optimize this factor in order to obtain an article with the optimal rigidity.

54. In regards to Applicant's arguments regarding the fact that it would be "far from obvious" that one of ordinary skill in the art would have combined the teachings of Dambricourt and Johnson et al. and arrived at the present invention. Examiner respectfully disagrees. Examiner has presented to references which are analogous art and given motivation to combine them, and as such arguments that one of ordinary skill

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in the art at the time of the invention would not have arrived at the present invention are not persuasive.

55. In regards to Applicant's arguments that there is no incentive for one of ordinary skill in the art to use the polypropylene copolymer of Johnson et al. with the invention of Dambricourt, Examiner disagrees and points to the motivational statement given in the original office action, "would benefit from the high puncture and tear resistant offered by Johnson et al. (column 1 lines 7-10)" as incentive to combine Dambricourt with Johnson et al.

56. In regards to Applicant's arguments that Johnson et al. does not define the water barrier characteristics of the polypropylene, examiner points out that there is nothing in the claims regarding water barrier characteristics, and Examiner further points out that as the materials taught by Johnson et al. are the same as Applicant's, the polypropylene would intrinsically have the same water barrier characteristics.

57. In regards to Applicant's arguments regarding the Nishikawa reference, Examiner notes that while Nishikawa et al. do not disclose all the features of the present claimed invention, they are used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, and in combination with the primary reference, discloses the presently claimed invention. If the secondary reference contained all the features of the present claimed invention, it would be identical to the present claimed invention, and there

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would be no need for secondary references. Examiner also points out that Nishikawa et al. is not used to teach specific polymers, and is only being used to teach the specific formation of the neck, specifically the a ring of material around the neck.

58. In regards to Applicant's arguments regarding the Doherty reference, Examiner notes that while Doherty et al. do not disclose all the features of the present claimed invention, they are used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, and in combination with the primary reference, discloses the presently claimed invention. If the secondary reference contained all the features of the present claimed invention, it would be identical to the present claimed invention, and there would be no need for secondary references.

Conclusion

59. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIK KASHNIKOW whose telephone number is (571)270-3475. The examiner can normally be reached on Monday-Friday 7:30-5:00PM EST (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Erik Kashnikov
Examiner
Art Unit 1794

/Callie E. Shosho/
Supervisory Patent Examiner, Art Unit 1794